



Politics of Ecosystem Services

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Ecosystem Services and Payments for Environmental Services:

A critical analysis of the genesis and diffusion of these concepts

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This communication deals with the question of the rapid and widespread dissemination of the concept of Ecosystem Services (ES) and the famous policy instrument, Payment for environmental services (PES), in the recent years.

(Diapo 2) The elements that I will present are based on the results of a research program called Serena, funded by the French Research Agency (ANR)¹. Since 2009, more than 30 researchers from the social sciences (economy, sociology, political science, geography, environmental Law...) have explored the emergence of ES, both at international and domestic level, and his diffusion through policy instruments at national or local level.

(Diapo 3) My presentation is organized in the following way:

- (1) A brief introduction on ES and PES emergence
- (2) The analytical framework
- (3) Insights from three case studies : Costa Rica, France and Madagascar
- (4) Concluding remarks

¹ www.serena-anr.org

(Diapo 4 – Tittle part 2) Firstly, about emergence, we hypothesized that the emergence process allows us to better understand the different forms of dissemination. The first and key result is to distinguish ES concept from PES schemes, as specific processes².

(Diapo 6) The notion of ES is earlier rooted in ecology, conservation biology (P Ehrlich, H Mooney, G Daily) and then in the field of ecological economics (R Costanza), with a first growing interest since 1997 (Gretchen Daily et al., Costanza et al.). The Millennium Ecosystem Assessment (MA) framework is based on ES concept: the publication of the MA reports in 2005 marks the beginning of a strong international recognition of ES as new concept to think relations between Nature and Society.

The PES, as policy instrument, is rooted in specific policies arenas (forest, water management) linked to conservation preoccupation in tropical areas. One of the emerging questions is how to fund conservation strategies and policies? After a first experiment in Costa Rica, there is an active process of dissemination led by forest sector lobbies (Forest trends) and the World Bank, mainly in Latin America in the early 2000's. Later, after the MA, PES scheme become an attractive policy instrument in various sectors and countries.

(Diapo 6) If we look at the journals, we show that there is two different “scientific communities”, except some crossroad supports like *Ecological Economics*. ES is more used in ecological journals and PES more in forest, conservation and more applied publications.

(Diapo 7) Authors are different and very few publish on ES and PES.

(Diapo 8) If ES and PES clearly rely on different streams of thought and action, interactions between the two processes have increased after 2005 in a synergistic way. The ES and PES “boom” appear clearly after the MA in 2005.

(Diapo 9) But how could we analyze these rapid diffusion processes?

(Diapo 10) We partly relied on the *Policy Transfer* framework which aims to understand “the process by which knowledge about policies in one political system is used in the development of policies in another political system”(Dolowitz and Marsh 2000). In this field of research, we mainly focus on few empirical questions like: Who are the key actors involved in the policy transfer process? What is exactly transferred? What restricts or facilitates the policy transfer process?

In the case of ES and PES, we can't always speak about transfer because the process of emergence and diffusion are quite embedded. Furthermore, except the specific case of Costa Rica, ES and PES dissemination are not based on one single-country to country model as the policy transfer framework suggests. It's more appropriate to speak about circulation between global scales (global environmental governance) and domestic scale. Why circulation? Because transfer is too uni-dimensional, the concept of circulation better reflects the mobility of ideas, experts and policy elements across scales.

² Pesche, Denis, Philippe Méral, Marie Hrabanski, and Marie Bonnin. 2013. "Ecosystem Services and Payments for Environmental Services: Two Sides of the Same Coin?" Pp. 67-86 in *Governing the Provision of Ecosystem Services*, edited by Roldan Muradian and Laura Rival: Springer Netherlands.

(Diapo 11) In a recent paper, Steven Bernstein and Ben Cashore³ elaborated a framework to capture the influence of international and transnational governance on domestic or firm policies and practice. For them “the overall structure of environmental governance is widely recognized to be fragmented, complex and often lacking in coherence”. The “complex global governance interacts with ‘complex sovereignty’ that is, the boundaries between global and domestic politics and policy can be blurred, which means that evaluating influence and effectiveness is not a one-way relationship of regime to implementation”. Bernstein and Cashore identify four pathways of global influence on domestic and firm-level policy change:

- (1) **“international rules pathway”** highlights the influence of issue-specific treaties and the policy prescriptions of powerful international organizations, like the World Bank, with an ‘harmonization’ or coercion process.
- (2) **“International norms and discourse pathway”** can define and regulate appropriate domestic behavior. This pathway operates through a logic of appropriateness (norm-guided without regard to consequences) and a logic of consequences (calculation). Here, the difference from the international rules pathway is one of degree more than kind.
- (3) **The markets pathway** encompasses processes or tactics that attempt to manipulate, work with or leverage markets to create domestic policy change. It includes direct action such as boycott campaigns and indirect action such as certification systems
- (4) **Direct access pathway** to domestic policy-making process. Transnational actors share resources, ideas, knowledge and expertise with existing groups or by facilitating the creation of new groups or coalitions in domestic arenas.

This framework seems fruitful to capture the dissemination of ES and PES in different areas.

(Diapo 12) Now, let me briefly present to you three case studies.

(Diapo 13) Costa Rica (Le Coq et al. 2013) has a specific position in this story, as the first country with a national policy including PES, since 1996. The forestry sector is well structured since the 1970’s with a forest policy including incentives mechanism since 1980’s. Costa Rica has a long history of collaboration with international scientists, mainly US, in conservation biology and ecological economics with the ISEE congress in 1994. After 1994, there is an opportunity window for policy change: the international context (Kyoto protocol, WTO limitation on subsidies) and a new executive team with a president more sensitive on environmental issues led to policy change. In 1996, a new forestry law lays the foundation for a program of PES which will become an international reference.

(Diapo 14) This pioneering experience occurs before the ES boom (2000 – 2005): Costa Rica contributes to build the legend of the PES in the early 2000. In this case, there is no direct influence of global governance on domestic policy but a combination of “international rules and discourse” pathway, with the post Rio context and local initiatives based on environmental elites baked by a strong institutional context. The ES

³ Bernstein, S., and B. Cashore. 2012. "Complex global governance and domestic policies: Four pathways of influence." *International Affairs* 88:585-604.

concept per se is used mainly by conservation biologist and, more recently, scientist working on agro-forestry issues.

(Diapo 15) Madagascar (Bidaud et al. 2013) is representative of a country highly dependent on international aid. Environmental policy begins to be built on 1990's. Pilots on PES do not appear until the late 2000s, in the context of a search for new funding mechanism for conservation. As biodiversity hot spot, Madagascar is also targeted for carbon sequestration schemes. A weak State paves the way for direct intervention of donor agencies, big NGO's and private sector. In that case, non-domestic actors, mainly transnational ones, have large room for maneuver to experiment PES schemes at local scale. We could also identify such "direct access way" in countries like Cambodia, where donors have strong influence.

(Diapo 16) Conversely, France (Maury et al. 2013) has strong institutions and sectoral policy frameworks, partly depending on European governing bodies. Since 1992, agri-environmental measures were slowly integrated through CAP framework. Late 1990s, the issue of multifunctionality occupy the debate in Europe and in international agricultural reforms arenas. Ministry of environment is a weak administration in comparison with agriculture or forestry. In fact, ES concept only arrive in France in late 2000's, mainly through a few scientist sensitive to biodiversity issues. France have famous scientist in biology and ecology but with very few connections to international debates on environmental regimes. The other key stakeholders for ES dissemination in France are private sector, with big firms depending on natural resources (water provision, cosmetics, cement...) and NGOs in conservation issues. European Union played a key role in the importation of ES and PES problematic with TEEB and EEA initiatives.

(Diapo 17) A small chart resumes shortly theses results.

Diffusion, transfer or circulation?

The dynamics of ES and PES dissemination takes various forms in different national contexts and periods. Some structural variables are important to explain the intensity and the modalities of diffusion: state thickness, degree of internationalization of scientist community, presence of big environmental NGOs...

The processes of ES and PES exportation/importation rely on diverse and mixed stakeholders configurations gathering scientists, NGOs, international organization and/private sector anchored both at domestic and international levels.

The emergence and the diffusion of ES are clearly linked to the production of new discourse and norms re-framing the relation between Nature and Society. The scientific communities and experts from or close to International organizations and convention are the more involved in emergence and diffusion.

The diffusion of PES is embedded in the willing to develop Market-based Instruments (MBI's) in environmental policies. This trend was boosted by the rapid development of carbon markets. In a lot of developing countries, transnational actors play a key role in experiment and implementation of PES schemes at local level.

Those who participate to the emergence of ES and/or PES are often involved in the diffusion process. For instance, IPBES is now managed by the key actors of the Millennium Assessment (Watson, Zakhri). Another example illustrate the mobility of ideas and peoples: a former environment ministry of Costa Rica, strong involved in the PES program is now vice-President for conservation policy at Conservation International (CI)!

(Diapo 18) Both for ES and PES, private sector and big environmental NGOs play a key role in dissemination now, with a growing criticism about the risk of commodification of nature. But that is another story...!

(Diapo 19) Thank you for your attention!

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